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ABSTRACT

A survey of 116 early intervention service providers for young children with disabilities examined their experiences and perceptions of providing services in natural environments such as the home, day-care center, restaurants, play grounds, etc. A questionnaire, "The Natural Environment Questionnaire," was developed which included questions with Likert-type responses, a checklist of services, and open-ended questions. Results indicated that in theory early intervention in natural environments is well accepted; however, different types of services are seen to be more or less appropriate for natural environments. Problems that service providers encountered in natural environments included: lack of private space, distractions, access to supplies/equipment, and transportation for families. Service providers recommended training in the form of workshops on specific topics, peer modeling, and training for families in order to increase the benefits of intervention in natural environments. The questionnaire is appended. (Contains 15 references.) (DB)

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Running Head: NATURAL ENVIRONMENT

ED 429 376

Are Natural Environments Unnatural?

A Survey of Early Intervention Specialists

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Abstract

Increasingly, early intervention services are provided in natural environments in order to meet the family centered and least restrictive provisions of Part C of P.L. 99-457. Natural environments are settings that are natural, or normal for the child's peers who have no disabilities. They include the home, day-care center, restaurants, play grounds -- any place the child is. This study surveyed service providers currently practicing in the field of early intervention about their experiences with and perceptions of natural environments. The instrument used was *"The Natural Environment Questionnaire,"* which consisted of: a series of questions with Likert-type responses, a checklist documenting the frequency and location of services provided for a one week period, and five open-ended questions. Results indicated that early intervention is well accepted, however different types of services are seen as more or less appropriate for natural environments. Problems that service providers encountered in natural environments included: lack of private space, distractions, access to supplies/equipment, and transportation for families. Service providers recommended training in the form of workshops on specific topics, peer modeling, and training for families in order to increase the benefits of intervention in natural environments. Natural environments must be considered for their potential to reach particular goals of early intervention.

Are Natural Environments Unnatural?

A Survey of Early Intervention Service Providers

Historically, early intervention services for infants and toddlers with developmental delays have been provided at early intervention centers. Increasingly, early intervention (EI) services are provided in natural environments in order to meet the family centered and least restrictive provisions of Part C of P.L. 99-457 (formerly known as Part H of the Individuals with Disabilities Education Act). Natural environments are settings that are natural, or normal for the child's peers who have no disabilities, or simply "where the child is." Natural environments include the home, day-care center, restaurants, play grounds, libraries, stores, and various other community settings. In its most broad sense, the term natural environment refers to all integrated community settings (Noonan & McCormick, 1993).

Currently, early intervention is most often provided in the home (Graham & Bryant, 1993). The home is the least restrictive environment for most infants and toddlers (Hanson & Lynch, 1995). Legislation, however, has prompted early intervention providers to expand natural environments beyond the home and into community settings.

Theoretical Rationale

The theoretical rationale for early intervention in natural environments adopts a systems perspective which includes an ecological approach to human development and the education philosophies of the least restrictive environment and the use of the Individualized Family Service Plan (IFSP). This unified rationale calls for collaboration across the systems within a child's life.

Bronfenbrenner (1977, 1979) proposed that we conceptualize child development as occurring within a series of embedded systems. The most proximal system consists of the setting in which the child lives (e.g., family, day-care), the next level of system indirectly influences the child by impacting some part of the first system (e.g., parent's job, extended family), and the final levels are the larger cultural settings (e.g., neighborhood, schools, ethnic group, social class, religious orientation). Each level of the system affects every other level of the system (Bronfenbrenner, 1977). Thus, each system affecting a child's development must be taken into consideration when planning where services are to be provided. Bronfenbrenner asserted the importance of natural environments in the determination of developmental outcomes in young children, and stressed the necessity of studying the factors that contribute to these outcomes (Thurman, Cornwell & Gottwald, 1997).

A systems approach to early intervention recognizes the invaluable means within a community, such as story-time at a local library, YMCA swim groups, activities offered at nature museums or community church programs and integrates them into the early intervention plan. These community resources are natural environments. Based on both research evidence and clinical experience, early intervention practices are more likely to be successful if community resources are used to meet the needs of the child and family (Thurman, Cornwell & Gottwald, 1997).

Inclusion in natural environments, such as community day care and library story time programs, allows for interaction with children without disabilities, and is considered to be least restrictive for infants and toddlers with disabilities. Early intervention specialists recognize the benefits for children with disabilities if they

socialize with children without disabilities (Langa & Feinberg, 1996). As defined in Public Law 94-142, the term least restrictive environment describes settings for young children with disabilities that are as close as possible to the settings of non-disabled young children (Hanson & Lynch, 1995). Least restrictive environments allow opportunity for growth that may not otherwise be present in a disabled child's life. The objective of services in these environments is to lessen the limitations in a child's life.

Family empowerment and family involvement in early intervention have become key components of planning for early intervention services in natural environments. Part C of IDEA redefined the way professionals work with families. The importance of parental involvement is now recognized in policy development, program implementation, training, and the IFSP process (Whitehead, Jesien, & Ulanski, 1998). The IFSP is the catalyst that connects early intervention to the specific needs of the child and the child's family. The IFSP views the child with special needs within the context of her or his family, and the assessments and program plans reflect the needs of the child, as well as dynamics within the family (Hanson & Lynch, 1995). Government standards not only call for a statement within the IFSP of the natural environments in which intervention is provided, but also justification of the extent to which services are *not* provided in a natural environment (House Report 102-198). The goal of the collaborative effort between families and services providers beginning with the IFSP, is to identify and utilize resources, including natural environments that are conducive to family empowerment and ultimately developmental potentials for the child.

Clearly there is a strong theoretical and empirical rationale for early intervention in natural environments. However, the value of legislation that forces

providers to change their service delivery practices has been questioned, and it has been pointed out that time will tell whether these changes have been successful (Gallager, 1989). When dealing with legislative change, Gallager (1989) warns that there is a danger in nonprofessionals producing guidelines for specialists. The real-life problems that families and service providers face when conducting early intervention in natural environments have yet to be explored. Preliminary research shows that children demonstrate developmental gains when receiving services in natural environments; however, there were important limitations such as a lack of training for service providers (Rowan, Barringer, Pehrson, & Meyden, 1997). The present study surveyed service providers currently practicing in the field of early intervention about their experiences with and perceptions of natural environments. The question remains: "are natural environments unnatural?

Methods

Procedures

Twenty-one directors of early intervention centers from a New England State were randomly selected to participate from a population of 65. The directors were mailed 18 copies of the *Natural Environment Questionnaire*, and a cover letter explaining the nature of the study and assuring confidentiality. The letter also stated that a final report of group findings would be sent to the state's Interagency Coordinating Council Subcommittee on Natural Environments, and to center directors. One week later a researcher contacted the directors by phone to follow up the letter and answer questions. Nineteen directors verbally agreed to participate, two were unable to participate due to internal audits being conducted at that time. Two additional directors were randomly selected to replace those involved in internal audits. Researchers followed the same procedures for the

additional directors. Participating directors were asked to distribute the questionnaire to their service providers. Two weeks later the directors were sent another letter to remind them about the study.

Respondents returned the questionnaire by fax or mail. Although, it is uncertain how many questionnaires each director distributed, or if they distributed them at all, interventionists from 16 centers responded, with a minimum of 1 and a maximum of 17 questionnaires from each center. The geographic locations of these centers roughly represent the distribution of centers in the state.

Sample

One-hundred-and-sixteen early interventionists from 16 different EI centers participated in the study. Occupations and disciplines of the service providers were diverse. They included educators (26%), social workers (20%), speech language pathologists (13%), psychologists (10%), registered nurses (10%), physical therapists (9%),occupational therapists (6%), and developmental therapists (6%). The average amount of time working in early intervention was 5.1 years (*sd*=4.9). There were significant differences in the amount of time working in the field of early intervention depending upon discipline ($F_{(7, 105)}$=2.3, p=.03). The physical therapists (*M*=9.7 years, *sd*=6.9) and educators (*M*=6.3, *sd*=5.3) that participated in this study were in the field for the longest time, and occupational therapists (*M*=2, *sd*=1.1) were in the field for the shortest amount of time. These means should be viewed cautiously, however, given the small sample sizes in some of these groups. According to the service providers 79% worked in an urban setting, 55% suburban, 16% rural (these percents exceed 100 because many service providers worked in multiple settings).

Instrument

The *Natural Environment Questionnaire* was developed by the authors based on an earlier survey conducted by the Natural Environments Subcommittee of the state's Interagency Coordinating Council. The questionnaire was reviewed and revised by the subcommittee. Finally, the questionnaire was piloted, and confusing or unclear questions were revised or eliminated. The final questionnaire (see Appendix A) included one checklist and a series of questions with Likert-typed responses. The checklist was designed for specialists to indicate the number of children served in the early intervention (EI) center and different natural environments for one week. Additionally, the checklist distinguished between group and individual services.

The questions on the questionnaire asked service providers to use a 1 to 6 Likert-typed scale to respond to: 9 statements about providing services for infants and toddlers in natural environments (α=.64), 15 items comparing natural environments and the EI center (α=.72) and 18 types of problems that might arise when working in natural environments (α=.84). The survey also included background information questions, and five open ended "final thoughts" questions that allowed interventionists to make recommendations for training.

Data from the "final thoughts" questions were analyzed using content analysis. Two researchers read all responses to the open-ended questions. One researcher then devised general categories of responses. Through meetings with the second researcher, the categories were discussed, and operationalized. Finally, open-ended responses were reviewed again, and the presence or absence of each category was recorded for all subjects. Service providers often gave several responses to each question and all responses were included in these results.

Results

Descriptive Statistics for all questions can be found in appendix A.

Where are Services Provided?

Of the 116 respondents, 104 completed a checklist for one week indicating the number of children they saw individually and in groups. They also indicated where they saw the children. Of the 1635 children seen individually, 1150 (71%) were seen in their home, 350 (21%) were seen in natural environments other than the home (see Figure 1), and 135 (8%) were seen at the EI center. Of the 1192 children seen in groups, 1047 (88%) were seen at the EI center, and the remaining 145 (12%) were seen in natural environments such as the home or community settings (see Figure 2).

The average number of children seen by each service provider during the one week period was 15.7 (sd=7.8) children seen individually and 11.5 (sd=11.7) children seen in groups. There was tremendous variation across service providers, and disciplines of service providers. Service providers from different disciplines saw differing rates of children individually ($F_{(7,94)}$=3.6, p=.002); occupational therapists (M=23.5, sd=12.6) and psychologists (M=20.4, sd=6.0) saw the most children individually, and educators (M=12.2, sd=5,1) the fewest. There was no difference across disciplines in the number of children seen in groups. There were no differences across disciplines of where they were most likely to see children, except for children seen individually in the home ($F_{(7,96)=}$2.3, p=.03). Occupational therapist (M=16.7, sd=9.2), and psychologists (M=14.7, sd=5.5) saw the most children individually in the home, and educators (M=9.0, sd=5.0), and developmental therapists (M=8.6, sd=2.6) saw the fewest number of children individually in the home. Because of the small sample sizes in some of these

groups, care should be used in the interpretation of these group differences.

Questionnaire Results

Because of the large number of items, this section will discuss only key items. The means and standard deviations for all questions are reported in Appendix A. All item responses were on 6-point Likert-typed scales.

The survey's results indicated that in theory early intervention in natural environments is well accepted by service providers (M=4.6, sd=1.3). Service providers of all disciplines disagree with the statement that the services they provide cannot be done in natural environments (M=2.0, sd=1.3). They tended to agree that parents understood procedures (M=3.7, sd=1.5), and outcomes (M=3.6, sd=1.4) of early intervention in natural environments. Service providers viewed lack of private space (M=3.8, sd=1.2), distractions during early intervention (M=3.9,sd=1.1), and access to supplies/equipment (M=3.7, sd=1.2) as moderate problems. Contrary to earlier survey results they did not have problems with too much parent/caregiver participation (M=1.8, sd=1.0), conflict with pediatricians/medical personnel (M=2.3, sd=1.1), nor sites being concerned about liability (M=2.4, sd=1.5).

Service providers of different disciplines did not report different types of problems, but there were some differences depending upon where service providers worked. Problems with the developmental appropriateness of the natural environment ($F_{(3,110)}$=2.9, p=.04), were seen as most likely to be a problem for those working in suburban areas (M=3.47, sd=.64), and least likely to be a problem for those working in rural areas (M=2.68, sd=.89). Lack of private space ($F_{(3,109)}$=3.2, p=.03) was most likely to be a problem for those working in a combination of urban and suburban areas (M=4.28, sd=.89).

Different types of services were seen as more or less appropriate for the EI center or natural environments. When asked which services work well at the EI center, service providers consistently indicated high agreement with all items. Only some types of services were seen as working well in natural environments (see Appendix A). Dependent t-tests were conducted to compare the service providers' perceptions of how well suited services are for natural environments versus the EI center (See Table 1). There were statistically significant differences for the majority of items. Those seen as better suited for the EI center were, direct therapeutic services, group services for children, group services for parents, assistance in accessing and using adaptive equipment, and opportunities for social interactions. In contrast, services seen as better suited for natural environments included, training and technical assistance for caregivers, coaching and modeling, and parental guidance. Furthermore, mothers, siblings, other caregivers, and relatives were seen as more likely to be involved with early intervention in natural environments rather than the EI center. There was no statistical differences for the likelihood that fathers or children without disabilities would participate in natural environments versus the EI center.

Content Analysis of "Final Thoughts"

When asked "how is the decision made to provide services in a natural environment?" -- 52% of service providers responded that it was the choice of the family. Other responses included: family in collaboration with the EI team (25%), needs of the child (23.3%), natural environment is a priority (20.7%), and transportation/schedule (19%).

Service providers were asked, "what type of training would you recommend to prepare service providers to work in natural environments?" Forty-five percent

of service providers indicated that they wanted specific training (44.8%); however, the types of specific training were diverse. For example, service providers suggested specific training in normal child development, interpersonal skills, assertiveness training, or play therapy. Other suggestions for training included: mentor/modeling (17.2%), training about family dynamics (13.8%), safety/universal precautions training (11.2%), training about diverse cultural and ethnic groups (9.5%), and training for families (6.9%).

Service providers expressed various concerns when asked "do you have any specific concerns/problems about intervention in the home?" Safety for the EI member (27.6%) was the most common concern. This contrasts an earlier item on the questionnaire on which interventionists indicated on a Likert-type scale that they had rarely had a problem with safety. Other concerns included in the open-ended responses were: parental needs (21.6%), too many distractions (19%), presence of sibling (14.7%), lack of space/equipment (12.1%), and lack of cleanliness of home (6.1%). When they were asked "do you have any specific concerns/problems about intervention in natural environments other than the home?" lack of quiet space/distractions (25%) was the most common problem listed. Service providers also listed problems with: transportation/funds for families (24.2%), collaboration with day care providers (23.3%), confidentiality/privacy (19.9%), communication with parents (16.4%), and safety/liability (13.8%).

Finally, service providers were asked, "what innovative ideas are used by the staff at your center in natural environments?" Forty-eight percent of interventionists mentioned the use of community settings such as, libraries, parks, beaches, stores, shelters, hospitals, the welfare office, and the pediatrician's office.

Other innovative ideas shared by the respondents included: small groups in the home or daycare (9.5%), adapting every day items such as laundry baskets to language and sensory motor activities (8.7%), including the parent in the activity (6.9%), using siblings as models (4.4%), and a co-treatment program that provided services in both natural environments and the EI center for an individual child (3.5%).

Discussion

This paper demonstrates where actual services are being provided, and what service providers think about providing services in natural environments. The service providers in this study provided most of their services in natural environments, indicated a general acceptance of early intervention in natural environments, and saw the natural environment as optimal for many types of services. They were concerned, however, about the complete elimination of the early intervention center, and a lack of training in how to provide intervention in natural environments.

Where are services being provided?

Supporting previous research (e.g. Noonan & McCormick, 1993), this study found that the child's home was the most common location for early intervention, particularly individual services. The service providers surveyed were extremely creative in their use of natural environments other than the home. Children and families were seen in locations such as restaurants, at medical appointments, in homeless shelters, and even on a bus.

Current regulations require that parents play a role in defining the intervention goals for their child, as well as deciding where intervention should occur (Saunders, 1995). Our study indicates that interventionists believed that

parents understand the procedures and outcomes of EI in natural environments, and have tremendous input about when to receive EI for their child in a natural environment. Furthermore, service providers indicated that, mothers, siblings, and other caregivers are more involved when services are provided in natural environments than when services are at the EI center.

Problems with early intervention in the natural environment

Problems that service providers encountered with services in natural environments included: lack of private space, distractions, access to supplies/equipment, and transportation for families. Service providers reported that based on their actual experiences safety was not a problem; however, it was a concern that came up repeatedly in open-ended questions. Disproportionately, those working in suburban and urban areas reported developmental appropriateness of the setting and lack of space as problems.

Despite these problems, natural environments have been praised as being ideal settings for instruction of natural activities, such as social and communication skills (Noonan & McCormick, 1993). The results of this survey indicate that many types of services were seen as appropriate for the natural environment; however, direct therapeutic services, assistance in accessing and using adaptive equipment, and group services were seen as more appropriate for the EI center. Overwhelmingly, group services for families and children occurred at the EI center, and only rarely did they take place in the home.

Training

One of the major concerns of states is the development of training programs to assure an adequate supply of qualified personnel to provide a wide array of early intervention services (Bailey, 1989). According to Hanson (1990), service

providers receive little training to work in natural environments. The service providers in the present study recommended training in the form of workshops on specific topics, and peer modeling of successful interventions in natural environments. Service providers also recommended training be provided to the families of infants and toddlers with a disability. Whitehead et al (1998) suggested the benefits of including parents in training are numerous.

Conclusion

The responses to this study will aid in the development of future policy for early intervention. Of course there were limitations to the present study, particularly the selection of the sample (service providers identified by center directors), and the exclusion of input from family members. Future research should include a larger sample, representative of numerous states, as well as input from family members. Additionally, the specific services that the interventionists in this study identified as appropriate or problematic for natural environments must be evaluated in actual practice.

Service providers are committed to progress in the field of early intervention and are a valuable source of information. Interventionists are continuously faced with new roles and responsibilities to transform traditional models of service into a family centered "best-practice" model (Griffer, 1997). According to the service providers surveyed, both natural environments and the EI center make unique contributions to the field of early intervention. Service providers made it clear that natural environments should not replace the EI center, but should compliment the services of the EI center. Early intervention should be needs driven, flexible, family centered, culturally competent, and most of all, empower families and their children (Thurman, Cornwell, & Gottwald, 1997). This can be accomplished

through work in the EI center, the child's home or other natural environment, or some combination. When choosing the "best" location for early intervention, natural environments must be considered for their potential to reach particular goals of early intervention. Natural environments are not unnatural in meeting the goals of early intervention.

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Table 1

Dependent t-tests comparing EI center to Natural Environments

	EI Center		Natural Environment			
Variable	*M*	*sd*	*M*	*sd*	*df*	*t*
Direct therapeutic services	5.1	1.2	4.6	1.4	113	3.0*
Training & Technical Assistance	4.5	1.4	5.1	1.1	112	-3.3**
Groups for Children	5.6	.9	2.9	1.7	112	12.6**
Groups for Parents	5.6	.9	3.0	1.7	112	13.0**
Access/Use Adaptive Equipment	4.8	1.4	4.2	1.6	108	2.9*
Coaching & Modeling	4.7	1.5	5.3	.9	113	-4.0**
Parental Guidance	4.8	1.4	5.4	1.0	113	-4.0**
Incidental Learning	3.3	.7	3.4	.7	112	-1.1
Social Interaction	3.6	.5	2.6	.8	114	10.7**
Mother is Involved	2.8	.8	3.2	.7	112	-4.9**
Father is Involved	2.1	.6	2.2	.6	113	-1.7
Siblings are Involved	1.9	.7	2.8	.7	113	-9.8**
Caregivers are Involved	2.1	.6	2.5	.7	113	-5.5**
Other Relatives are Involved	2.0	.6	2.3	.6	113	-4.8**
Children without Disabilities	2.3	2.3	2.5	.7	110	-1.1

*=$p<.01$, **=$p\leq.001$

Figure Caption

Figure 1. Location of Individual Services in Natural Environments Other than Child's Home

Figure 1

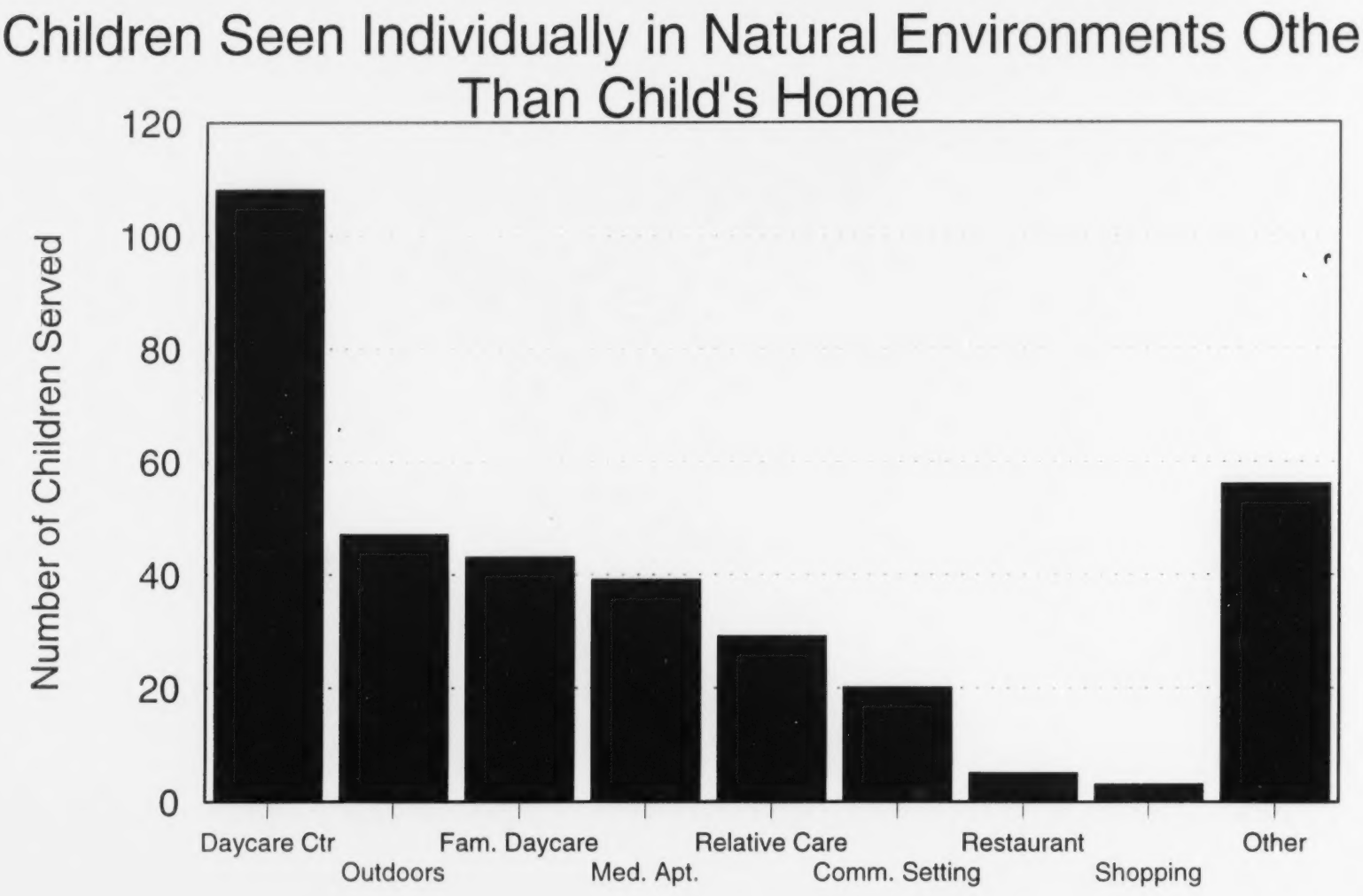
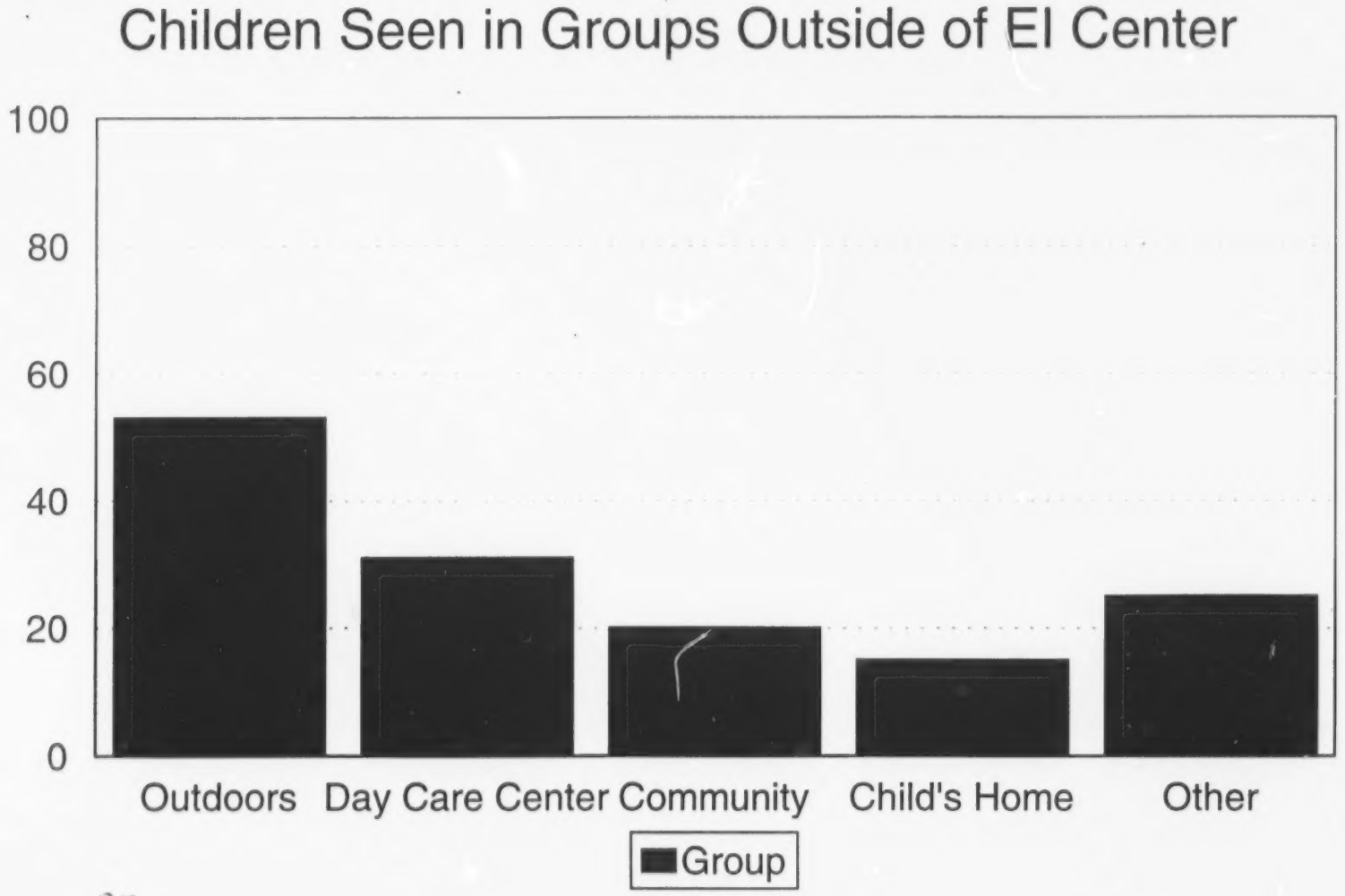

Children Seen Individually in Natural Environments Other Than Child's Home
Number of Children Served
120
100
80
60
40
20
0
Daycare Ctr
Outdoors
Fam. Daycare
Med. Apt.
Relative Care
Comm. Setting
Restaurant
Shopping
Other

Figure Caption

Figure 2. Location of Group Services Other than EI Center

Figure 2


Children Seen in Groups Outside of EI Center
100
80
60
40
20
0
Outdoors
Day Care Center
Community
Child's Home
Other
Group

Appendix A

Descriptive Statistics for:
NATURAL ENVIRONMENT QUESTIONNAIRE

Natural environments are environments in which an infant or toddler would spend time if she or he were not eligible for early intervention -- **such as the home environment, day-care setting, parks, libraries, restaurants, etc**. Due to the increased frequency of providing early intervention (EI) in these environments, it is necessary to understand the associated benefits and potential problems. Your **honest** responses to the questions below will help us understand these issues. Your opinions are important! All responses are confidential.

INSTRUCTIONS:

1. Please fill out the attached checklist (p. 6). The checklist requires that you pay attention to where you provide services, and for one week fill out exactly where services are provided. We encourage you to provide additional information on the back of the chart.

2. After the checklist is complete, please answer the following questions. Please try hard to answer all questions. Your responses are completely confidential. We encourage you to provide additional comments at the end of the questionnaire.

3. All information should be returned by mail or fax to:

Dr. Lynn Shelley
Department of Psychology
Westfield State College
Westfield, MA 01086
Fax (413) 572-5764

BACKGROUND INFORMATION:

How would you describe the area that you serve? 79% Urban

55% Suburban

16% Rural
(Check all that apply)

What is your job title/discipline? 26% Educator; 20% Social Worker; 13% Speech Language Pathologist; 10% Psychologist; 10% Registered Nurse; 9% Physical Therapist; 6% Occupational Therapist; 6% Developmental Therapist

How many years have you been working in early intervention? *M*=5.2 (*sd*=4.9) range .25 - 23 years

For the children/families you are service coordinator for:

approximately what percent are seen **predominantly in the home**? *M*=72.8 (*sd*=26.9)

approximately what percent are seen **predominantly at the EI center**? *M*=7.8 (*sd*=12.6)

approximately what percent are seen **predominantly in natural environments other than the home**? *M*=5.4 (*sd*=7.5)

approximately what percent are seen in a **combination of both natural environments and the EI center**? *M*=20.1 (*sd*=28.6)

The total should be 100%

EARLY INTERVENTION SERVICES IN THE NATURAL ENVIRONMENT

*1. Use the following scale to show **your** agreement with the statements below:*

1	2	3	4	5	6
STRONGLY DISAGREE					STRONGLY AGREE

	M	*sd*
Intervention in natural environments is well accepted by the service providers of my center.	4.6	1.3
Intervention at the EI center is more effective than in the natural environment.	2.8	1.1
Early interventionists receive adequate training to work in natural environments.	3.5	1.4
The services that I provide can not be done in natural environments.	2.6	1.3
Parents prefer early intervention at the EI center more than in natural environments.	2.7	1.2
Parents understand procedures of EI in natural environments.	3.7	1.5
Parents understand outcomes of EI in the natural environment.	3.6	1.4
Medical professionals (e.g., Pediatricians) support intervention in the natural environment.	3.4	1.3
Medical professionals understand the rationale of treatment in the natural environment.	3.4	1.4

*2. Use the scale below to rate how well the following services work in natural environments and at the EI center. Please provide ratings for **both** locations.*

1	2	3	4	5	6
POORLY SUITED					WELL SUITED

	In Natural Environments		**At EI Center**	
	M	*sd*	*M*	*sd*
Direct therapeutic services	4.6	1.4	5.1	1.2
Training and technical assistance to caregivers	5.1	1.1	4.5	1.4
Group services for children	2.9	1.7	5.6	.9
Group services for parents	3.0	1.7	5.6	.9
Assistance in accessing and using adaptive equipment	4.2	1.6	4.8	1.4
Coaching and modeling	5.3	.9	4.7	1.5
Parental guidance	5.4	1.0	4.8	1.4

*3. Rate how often the following things occur during EI in natural environments and at the EI center. Please provide ratings for **both** locations.*

1 NEVER 2 OCCASIONALLY 3 FREQUENTLY 4 ALWAYS

	In Natural Environments		At EI Center	
	M	*sd*	*M*	*sd*
Opportunities for incidental learning	3.3	.7	3.3	.7
Opportunities for social interaction	2.6	.8	2.6	.5
Mother is involved	3.2	.6	2.8	.8
Father is involved	2.2	.6	2.1	.6
Siblings are involved	2.8	.7	1.9	.7
Caregivers (non-relative) are involved	2.5	.7	2.1	.6
Other Relatives are involved	2.3	.6	2.0	.6
Children without disabilities are involved	2.5	.7	2.3	2.2

PROBLEMS AND CONCERNS WITH EI SERVICES IN THE NATURAL ENVIRONMENT

4. Please show the degree to which the following factors have been problems when conducting early intervention in natural environments such as a day-care center, home, community center, etc..

1 NEVER A PROBLEM 2 3 4 5 6 ALWAYS A PROBLEM

	M	*sd*
State's funding policies	3.1	1.7
Travel time /parking for service provider	3.4	1.4
Safety of service provider	2.9	1.1
Transportation for child	2.9	1.6
Accessability to natural environment for disabled child.	3.0	1.3
Developmental appropriateness of setting	3.2	1.0
Lack of private space	3.8	1.3
Distractions during early intervention	3.9	1.1
Access to supplies/equipment	3.7	1.2

1	2	3	4	5	6
NEVER A PROBLEM					ALWAYS A PROBLEM

	M	*sd*
Confidentiality (e.g., onlookers observing EI)	3.3	1.2
Too much parent/care-giver participation	1.8	1.0
Too little parent/care-giver participation	3.3	1.0
Sites (e.g., daycare center, store) are concerned about liability	2.4	1.5
Treatment does not carry over to home	3.3	1.2
Communication with parent if parent is not present during EI	3.3	1.3
Conflict with pediatrician/medical personnel	2.3	1.1
Working with families where English is a second language.	3.3	1.4
Working with families of diverse ethnic backgrounds.	2.6	1.2

FINAL THOUGHTS:

* 116 participants responded to these questions, often with more than one response. Percentages indicate the percent of participants that gave a particular response to each question.

5. Typically, how is the decision made to provide intervention in a natural environment?

- 52% Family Choice
- 25% EI team with family
- 23% Based on Needs of the Child
- 21% Natural Environments are the priority
- 19% Transportation/Schedule

6. What innovative ideas are used by the staff at your center in natural environments?

- 48% Use of community settings (libraries, stores, shelters, buses, beaches, doctor's offices)
- 10% Small groups at home or day-care
- 9% Use of everyday items (e.g. laundry baskets) for language and motor activiites
- 7% Include parent in activities
- 4% Use siblings as models
- 4% Co-treatment using the EI center and natural environments

7. Do you have any specific concerns/problems about intervention in the home?

28% Safety for EI member
22% Parental Needs
19% Too many distractions of child's attention
15% Presence of siblings
12% Lack of space
6% Lack of cleanliness of home

8. Do you have any specific concerns/problems about intervention in natural environments other than the home?

25% Lack of quiet space/distractions
24% Transportation/funds for families
23% Collaboration with day-care providers
20% Confidentiality/privacy
16% Communication with parents
14% Safety/Liability

9. What type of training would you recommend to prepare service providers to work in natural environments?

45% Specific Areas/Skills (e.g. child development, interpersonal skills, assertion, play therapy)
17% Mentor Program/ Modeling
14% Family Dynamics
11% Safety & Universal Precautions
10% Cultural / Ethnic Diversity
7% Training <u>for</u> Families

Where Do You Provide Services?

For each day of one week write the number of children you provided services for in each of the following locations. Please read all of the locations thoroughly so that we can get a good picture of where you provide services. If you were in more than one location with a child, indicate BOTH sites. There are separate columns for individual and group services. For each day, please provide the TOTAL number of children you served (e.g., if you worked at the EI Center with a group of 6 children, and another of 2, indicate 8 on the "GROUP SERVICES" chart).

* Chart revised for data presentation. Chart for the actual questionnaire reflected daily totals rather than weekly total.

Please Indicate Date:	***INDIVIDUAL SERVICES*** Results=Total for Week	***GROUP SERVICES*** Results = Total for Week
EI Center	135	1047
Inside Child's Home	1150	15
Day-Care Center	108	31
Licensed Family Day-Care	37	0
Unlicensed Family Day-Care (non relative's)	6	0
Child's Relative's Home (e.g., daycare at Grandma's)	29	1
Outdoors with child alone (e.g., yard, walk, farm)	33	0
Outdoors in a group (e.g., playground, parks)	14	53
Restaurant (e.g., McDonald's, Dunkin Donuts)	5	1
Shopping (e.g., grocery store, toy store, mall)	3	0
Community/Public Setting (Library, Zoo, Community Center, Children's Museum)	20	20
Medical appointments/Hospital NICU	39	0
Other (Please explain)	56	0

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